20220329在WIN10安裝並使用SQLITE3資料庫及設計C語言連線處理程式

REF 0:<https://www.1ju.org/sqlite/installation>

REF 1: <https://www.itread01.com/content/1546801386.html>

REF2: <https://www.itread01.com/p/1393649.html>

(一)下載、解開並安裝：

|  |
| --- |
| **Precompiled Binaries for Windows** |
|  | [sqlite-dll-win32-x86-3380200.zip](https://www.sqlite.org/2022/sqlite-dll-win32-x86-3380200.zip)(553.70 KiB) |  | 32-bit DLL (x86) for SQLite version 3.38.2.(sha3: b61e859ff10f052ae078aefef9a8d783884b8c27eac0be099e15f65d74bbf59c) |
|  | [sqlite-dll-win64-x64-3380200.zip](https://www.sqlite.org/2022/sqlite-dll-win64-x64-3380200.zip)(994.42 KiB) |  | 64-bit DLL (x64) for SQLite version 3.38.2.(sha3: 5f3a43c438cb4cc3ac56358e005c7f190105cdd5d3b02910b6818b1dde23f5c3) |
|  | [sqlite-tools-win32-x86-3380200.zip](https://www.sqlite.org/2022/sqlite-tools-win32-x86-3380200.zip)(1.87 MiB) |  | A bundle of command-line tools for managing SQLite database files, including the [command-line shell](https://www.sqlite.org/cli.html) program, the [sqldiff.exe](https://www.sqlite.org/sqldiff.html) program, and the [sqlite3\_analyzer.exe](https://www.sqlite.org/sqlanalyze.html) program.(sha3: 0e22e47873902388e3b26c3702fa3cd53ab3f29e315014d7fe25efb0aefbf6bf) |





(二)使用sqlite3命列列來建立freeHB2測試資料庫

# sqlite3 freeHB2;

SQLite version 3.38.2 2022-03-26 13:51:10

Enter ".help" for usage hints.

sqlite> CREATE TABLE CUSTS(id char(10),name char(20),amount float,tel char(20));

sqlite> insert into CUSTS(id,name,amount,tel) values ('10001','小狗',100,'233111');

sqlite> insert into CUSTS(id,name,amount,tel) values ('20002','小貓',200,'233444');

sqlite> insert into CUSTS(id,name,amount,tel) values ('30003','小牛',300,'233777');

sqlite> insert into CUSTS(id,name,amount,tel) values ('50001','小龍',100,'233111');

sqlite> update CUSTS SET NAME='SMALLDOG' WHERE NAME='小狗';

sqlite> select \* from CUSTS;

10001|SMALLDOG|100.0|233111

20002|小貓|200.0|233444

30003|小牛|300.0|233777

50001|小龍|100.0|233111

sqlite> .quit

(三)編寫測試C語言程式來連線查詢freeHB2資料庫內的CUSTS資料表：

# vi sqlA.c

# cat sqlA.c

|  |
| --- |
| // gcc -o sqlA sqlA.c -lsqlite3#include <stdio.h>#include <stdlib.h>#include <sqlite3.h>//每查到一筆記錄的觸發函數int ListRecColumns(void \*p, int n\_column, char \*\*column\_value, char \*\*column\_name){ \*(int \*)p = 0; for(int i =0; i < n\_column; i++){ printf("%s = %s ", column\_name[i], column\_value[i] ? column\_value[i] :"NULL"); } printf("\n"); return 0; }int main(int argc, char \*argv[]){ sqlite3 \*db; char \*err =0; int ret =0; int empty =1; ret = sqlite3\_open("freeHB2",&db); if(ret !=SQLITE\_OK)exit(1); ret = sqlite3\_exec(db, "select \* from CUSTS;" , ListRecColumns, &empty, &err); if(ret != SQLITE\_OK){ sqlite3\_close(db); exit(1); } if(empty)exit(1); sqlite3\_close(db); return 0;} |

編譯

# gcc -o sqlA sqlA.c -lsqlite3

# ls -lt

total 152216

-rwxr-xr-x 1 root root 19712 Mar 26 22:42 sqlA

-rw-r--r-- 1 root root 739 Mar 26 22:42 sqlA.c

-rw-r--r-- 1 root root 8192 Mar 26 21:45 freeHB2

執行

# ./sqlA

id = 10001 name = SMALLDOG amount = 100.0 tel = 233111

id = 20002 name = 小貓 amount = 200.0 tel = 233444

id = 30003 name = 小牛 amount = 300.0 tel = 233777

id = 50001 name = 小龍 amount = 100.0 tel = 233111